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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/612,970	07/10/2000	Young-ok Koh	1293.1133/MDS	9404

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EXAMINER

BATTAGLIA, MICHAEL V

ART UNIT PAPER NUMBER

2652

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/612,970	KOH, YOUNG-OK	
	Examiner	Art Unit	
	Michael V Battaglia	2652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2004.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 3, 11-15 and 17-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-15 and 21 is/are allowed.
- 6) ☒ Claim(s) 3 and 17-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 3 and 17-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Katou et al (hereafter Katou) (US 6,181,652).

In regard to claim 3, Katou discloses a method of reproducing data from a disc (Fig. 12, element 4) in a disc-reproducing system (Figs. 12 and 13), comprising: positioning a pick-up at a specified position on the disc and counting a number of track traverse pulses which are generated when a tracking loop is switched to "OFF" at a first speed factor and a second speed factor (Col. 15, lines 14-18, 49-50 and 66-67); determining whether the disc is one of axially eccentric and mass eccentric using the counts at the first and second speed factors (Col. 16, lines 5-13); varying a speed factor of reproducing data from the disc according to the type of disc eccentricity (Col. 16, lines 14-23); and maintaining the pickup in a fixed position while counting the number of track traverse pulses (Col. 15, lines 14-18 and 49-50). Also, see Response to Arguments below for further explanation.

In regard to claim 17, Katou discloses an apparatus for reproducing data from a disc inducing vibration, comprising: a pick-up unit (Fig. 12, element 1) maintaining a fixed position while detecting a tracking traverse signal; a signal comparator (Fig. 13, element 97) comparing the

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tracking traverse signal with a base signal and then generating a tracking traverse pulse signal comprised of at least one tracking traverse pulse (Col. 15, lines 52-53); and a control unit (Figs. 12 and 13, element 11b) which counts the number of track traverse pulses generated at a first revolving speed of the disc and at a second revolving speed of the disc, determines whether the disc is one of axially eccentric and mass eccentric using the track traverse pulse counts at the first and second revolving speeds, and changes a speed of the disc according to the type of disc eccentricity (Col. 15, line 61-Col. 16, line 22 and Response to Arguments below).

In regard to claim 18, Katou discloses that the pick-up unit further comprises a tracking "OFF" state and a tracking "ON" state, and the pick-up unit detects a tracking traverse signal by revolving the disc in the tracking "OFF" state (Col. 15, lines 14-18 and 49-50).

In regard to claim 19, Katou discloses that the apparatus further comprises a signal amplifying unit to differentially amplify the tracking traverse signal detected in the pick-up unit prior to sending the signal to the signal comparator (Fig. 2, element 53).

In regard to claim 20, Katou discloses the control unit counts the number of track traverse pulses at a predetermined time (Col. 15, lines 63-65).

### ***Allowable Subject Matter***

2. Claims 11-15 and 21 are allowable over the prior art of record. Claims 11-15 are allowable for the reasons previously specified. In regard to claim 21, none of the references of record alone or in combination suggest or fairly teach an apparatus for reproducing data from a disc inducing vibration, comprising: a pick-un unit maintaining a fixed position while detecting a tracking traverse signal: a signal comparator comparing the tracking traverse signal with a base signal and then generating a tracking traverse pulse signal comprised of at least one tracking traverse pulse; and a

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control unit that counts the number of track traverse pulses generated in the signal comparator at a first revolving speed of the disc and also at a second revolving speed of the disc, determines a frequency of vibration of the disc based upon the track traverse pulse counts, and changes a speed of the disc based upon the frequency of vibration of the disc, wherein the pick-up unit further comprises a tracking "OFF" state and a tracking "ON" state, and the nick-un unit detects a tracking traverse signal by revolving the disc in the tracking "OFF" state, wherein the control unit counts the number of track traverse pulses at a predetermined time; and **wherein the predetermined time for counting the number of track traverse pulses is approximately 100ms after checking an innermost circumference of the disc.**

### *Response to Arguments*

3. Applicant's arguments filed July 12, 2004 with respect to Katou have been fully considered but they are not persuasive. Applicant argues that Katou determines whether a disc is hole eccentric and does not determine a whether the disc is one of axially eccentric and mass eccentric. However, a hole eccentric disk (Fig. 6) is also mass eccentric because when the spindle hole is not located in the geometric center of the disc as in a hole eccentric disc (Col. 2, lines 60-62), a center of gravity that is not the geometric center of the disc and a weight imbalance result (features indicative of a mass eccentric disc (see Page 5, lines 5-6 and 11-13 of Applicant's specification)). In addition, Katou's determining the difference between track traverse pulse counts at the first and second speeds (Col. 15, line 61-Col. 16, line 15) meets the claimed "determining whether the disc is one of axially eccentric and mass eccentric" because if the disc of Katou (Fig. 12, element 4) is one of axially eccentric and mass eccentric, the difference will be large compared to the difference in a net eccentric or non-eccentric disc (Page 6, lines 3-12 of Applicant's specification). Lastly, it is

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noted that the changing or varying a speed factor of reproducing data from the disc "according to the type of disc eccentricity" as claimed in claims 3 and 17 is interpreted as changing or varying a speed factor of reproducing data from the disc according to a difference in the measure of disc eccentricity at first and second speed factors which depends on the type of disc eccentricity as described by Applicant's specification and Katou because otherwise the changing or varying of a speed factor "according to the type of disc eccentricity" would be new matter.

### *Conclusion*


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael V Battaglia whose telephone number is (703) 305-4534. The examiner can normally be reached on 5-4/9 Plan with 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael Battaglia

  
ALLEN CAO  
PRIMARY EXAMINER